

# USDA Free Fruit and Vegetable Pilot Program

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## Background

The Nutrition Title of the 2002 Farm Act provided \$6 million for a United States Department of Agriculture (USDA) Free Fruit and Vegetable Pilot Program (FVPP) to be conducted in the 2002-2003 school year. Under the administration of the USDA Food and Nutrition Service (FNS), the "intent of the program is to determine the feasibility of carrying out such a program and its success as determined by the students' interest in participating in the program" according to the legislative language of the bill. Free items, to include fresh or dried fruits and fresh vegetables, were to be made available to students in the pilot schools. Before the pilot was conducted, no one knew if the students would actually eat the fruits and vegetables nor whether the schools could administer such a program.



The conference report from the farm bill recommended Indiana, Iowa, Michigan, and Ohio as the four pilot states along with one Indian Reservation, the Zuni Indian Tribal Organization in New Mexico, with seven participating schools. Each of the four states was allowed to conduct the pilot in 25 schools representing large and small, rural, suburban and urban elementary, middle and high schools. The selection of schools was to include students from diverse ethnic backgrounds and family income levels, as assessed by the proportion of students certified as eligible for free and reduced-price lunches.

The schools were to serve dried or fresh fruit and fresh vegetables (no canned or frozen) at any time during the school day except during regular meal service times. The schools had freedom of choice in the manner of delivery including classroom service, kiosks, free vending machines or a combination of delivery methods. Schools were encouraged, but not required, to conduct educational and/or promotional activities with school events as well as daily classroom schedules. The pilot program was generously funded at approximately \$94 per student.

Schools in the four selected states were invited to submit an application to their state school lunch program. The 2002 Farm Bill was enacted in July 2002. The invitation to submit an application came in late July when most of the school food service personnel were on summer leave. Even with that barrier, Indiana still had 106 applications for the 25 pilot slots. The Indiana Department of Education Division of School Food and Nutrition Program reviewed the applications, made comments and sent them to the USDA who made the final selections.

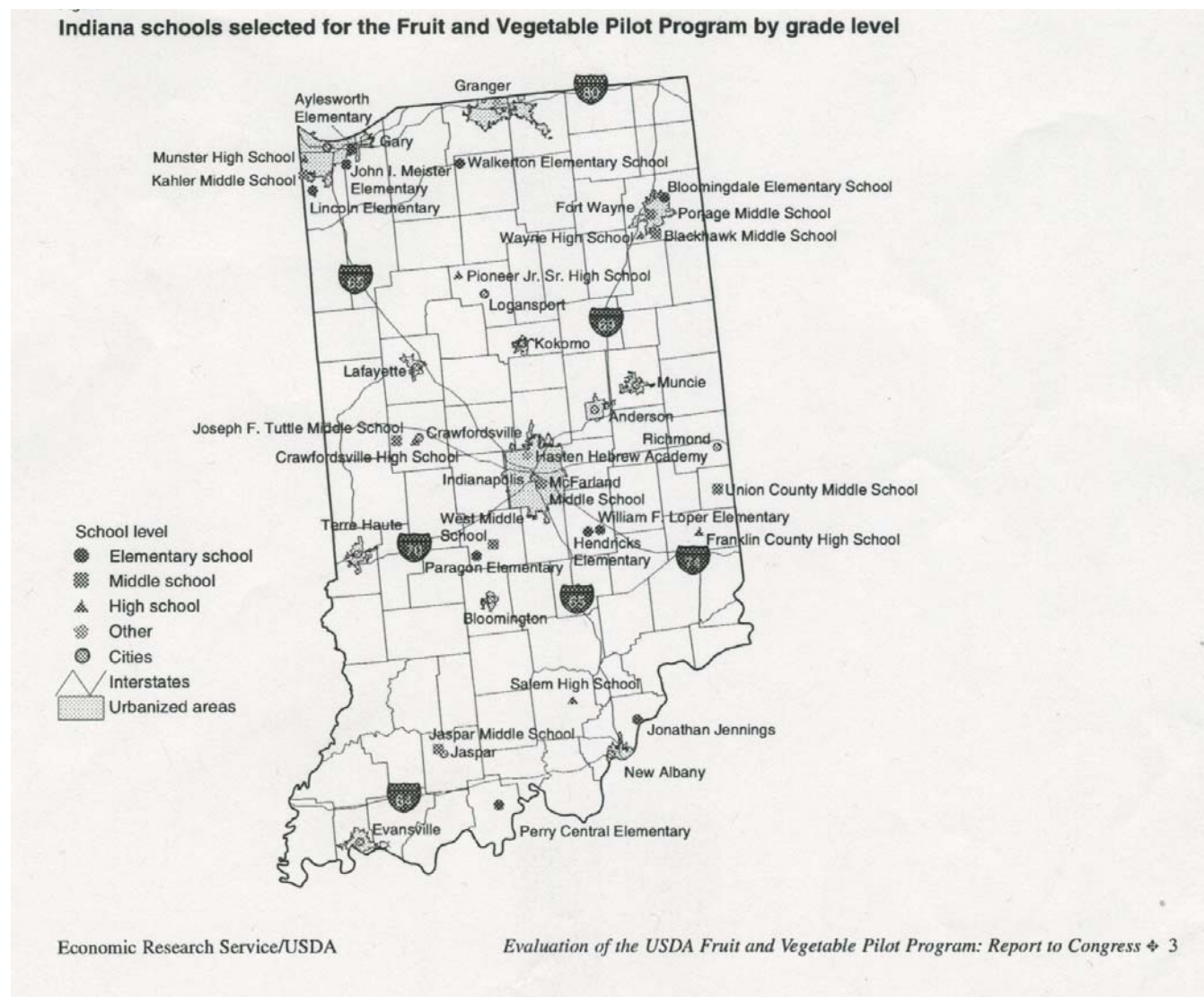
Evaluation of the FVPP was funded as part of the farm bill and assigned to the USDA Economic Research Service (ERS). Congressional deadlines required the evaluation to take place in December 2002, and February 2003. This was a short deadline since most schools were unable to start the pilot program before late October 2002.

## Indiana's Pilot Program

The Indiana schools selected by the USDA Food and Nutrition Service to participate in the FVPP included 1 private and 24 public schools with a total enrollment of 15,059, an average of 553 students per school (Figure 1). There were 10 elementary, 8 middle and 6 high schools with approximately the same total enrollment for each grade. School locations included 9 urban, 8 rural and 8 suburban schools, all of

who participate in the National School Lunch Program (NSLP). Ten of the 25 Indiana schools had a high percentage of students who qualify for free and reduced-price school meals, and 15 schools had a low percentage. This was consistent with the distribution of schools in the other 3 states.

**Figure 1.**



All schools selected for the pilot asked to participate and were very enthusiastic. Schools were required to designate a coordinator for the program within the school. Usually, because of the need to receive and store produce, this person was the food service director, but this was not a requirement.

## **The National Pilot Program**

A variety of distribution methods were used by Indiana schools. Most elementary schools found that it was easier to maintain order and include nutrition education by serving the fruits and vegetables in the classroom. The FVPP guidelines allowed schools to serve fresh fruit smoothies and freshly squeezed juice, locally produced, no more than once a week. Only 22 percent of schools served juice. This was probably due to the location of the four states in the pilot program. The only locally produced fresh juice

in these states was apple juice. Since the pilot did not start until late in October, there was limited opportunity for this type of fresh juice.

The funding allowed schools to purchase ready-to-serve fruits and vegetables since they were allowed only 10% of the total funds for administrative costs. After paying for additional storage and service items, this amount did not leave enough funds to cover labor costs for preparing the produce in-house. Most schools (96%) bought pre-cut or pre-prepared items (pre-sliced apples, individually bagged carrots, etc.) or served dips, nuts, or small side condiments to complement pilot foods and influence acceptance. Almost 75% of schools made special arrangements to buy prepared trays from local sources. This not only avoided labor costs, but it also allowed for a greater variety and quantity of fresh produce.

Many students were unfamiliar with some fruits and vegetables, but quickly began to accept them. Some incidents were reported of children not knowing how to eat a pear or not realizing that oranges and tangerines had to be peeled before eating. Pilot coordinators seized the opportunity to expose the children to as many new fruit and vegetable items as possible. One new item offered in several Indiana schools was pomegranate seeds, available during the Christmas/New Year's holiday season. Even experienced food service personnel were surprised at how much time was required to extract the colorful, flavorful seeds from the pomegranates and portion them for the children. Schools who made this time investment felt that it was worthwhile after seeing the excitement created among the students.

The FVPP guidelines did not limit the number of times a day the fruits and vegetables were offered nor the time during the day for the offering. Therefore, 79% of schools had multiple distribution times. Most schools (81%) offered the fruits and vegetables during morning school sessions, 63% during afternoon school sessions, 59% after school and 28% before school. Many schools seized this opportunity to provide after-school snacks for students participating in sports or other after-school activities.

Strawberries were reported as the favorite fruit, although hand-held fruit such as apples, bananas, oranges and pears were most commonly served. Dried fruits were not as well accepted as fresh fruits. Carrots, celery and broccoli were the most popular vegetables. Fruits were better accepted than vegetables. Grapes were popular with the school children, but were usually discontinued after becoming a messy problem due to students' using them to throw at each other in food fights rather than eating them. Only a few schools were able to maintain discipline and continue to serve grapes. This was the only item which posed such a problem. Most schools anticipated a problem with trash in the classrooms and halls from the fruits and vegetables. Actually, many school janitors reported less trash from candy wrappers and said that the fruit and vegetable trash was disposed of properly.

## **FVPP Evaluation**

Quantitative data on the effects of the pilot are limited due to the constraints of the study. Some schools reported they had a lower volume of sales of candy and other less nutritious foods, but it was impossible to gather data to support this perception. Another perception was that nearly everyone recognized some health benefit or other value from the pilot including increased attention in class, fewer visits to the school nurse, reduced consumption of less healthy food, and reduced number of unhealthy snacks brought from home. They felt that the pilot increased students' awareness and preference for a variety of fruits and vegetables (particularly less familiar items such as kiwis and fresh pears), helped children who would otherwise be hungry get more food, and increased students' consumption of fruits and vegetables at lunch.

Any evaluation of the FVPP must include the fact that the pilot schools wanted to participate in the program enough to compete for the limited number of slots available. Whether schools without this level of commitment would successfully implement a similar free fruit and vegetable program is unknown. If this program is ever implemented nationwide, commitment of school personnel will be an issue.

This FVPP produced valuable effects, which cannot be measured or put on a scale. It brought school personnel from several departments together working toward a shared goal. The pilot program created a positive relationship between the school food service personnel and the rest of the school staff. This is vital to any successful nutrition program. Students, school personnel and parents were given a reason to examine the nutrition content of foods being offered to school children. It was easy to substitute more healthful items for high fat and sugar items commonly being served for special events and snacks during the pilot project. When funds are depleted, schools are challenged to maintain the health standard when purchasing food items with local funds.

## **Follow-Up**

The FVPP was funded at a high level since no one knew the cost to conduct such a project. Little more than half the available funding was used due to many reasons, including the late start of the program. USDA representatives informed FVPP project coordinators that any unspent funds would revert back to USDA and not be available after June 30, 2003. This did not encourage restraint in purchasing expensive fruits and vegetables, often ready to serve. However, an act of Congress was passed late in the pilot project that will permit pilot schools to continue the program during the 2003-2004 school year until remaining funds are spent. Each state was given the option of redistributing the remaining funds among their pilot schools. All pilot schools were eager to continue the FVPP except one school (not in Indiana) that had personnel changes.

## **Lessons Learned**

Even with the late start in the school year, consensus among students, parents, teachers and other school personnel was that the program was a success. Some of the lessons learned included:

- School children (K-12) will eat fruits and vegetables when given the opportunity.
- Non-food costs will be more than 10% if frugal food purchasing and preparation are implemented.
- More preplanning time is needed for successful, smooth implementation of the program.
- More preplanning time is needed in order to incorporate nutrition education and product promotion.
- Ways are needed to motivate students to eat more vegetables without high fat dips.
- Free fruits and vegetables can be served for less than \$94 per student per year.

## **Recommendations for National Expansion of the FVPP**

Federal legislation has been introduced to extend the FVPP to all states with 25 pilot schools per state. This would be followed by expansion to all schools nationwide. Nationwide expansion of the program at a comparable level of the pilot would cost an estimated \$4.5 billion. This amount could be reduced if less expensive fruits and vegetables were selected and if they were offered only once a day. Participation in the program would need to be voluntary because of the huge amount of work required to make it successful. Pilot schools could help new schools avoid pitfalls and use the program to their best advantage.

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